IN THE SPECIFICATION:

Please amend the specification as follows.

On page 2, paragraph 4:

[4] ISI phenomena may be modeled mathematically. In the case where the data signal **X** is populated by a number of data symbols x_n, captured signals y_n at the destination 120 may be represented as:

$$y_n = a_0 \cdot x_n + f(x_{n-K_1}, \cdots, x_{n-1}, x_{n+1}, \cdots, x_{n+K_2}) + \omega_n. \tag{1}$$

where a_0 represents a gain factor associated with the channel 130, $f(x_{n-K_1}, \ldots x_{n+K_2})$ is a functional representation that relates the ISI to the symbols, $x_{n-K_1}, \ldots x_{n+K_2}$, causing ISI corruption and ω_n represents corruption from other sources. In linear systems, equation 2 may reduce to:

$$y_n = x_n + \sum_{\substack{i=-K_1 \\ i \neq 0}}^{K_2} a_i \cdot x_{n-i} + \omega_n \tag{2}$$

where $a_{-K_1}, \ldots a_{K_2}$ represent the ~~sampled~~ values of the impulse response of the channel. In accordance to common practice, the values a_i have been normalized by the value of a_0 in equation 2.

On page 8, paragraph 34:

[34] In this way, the method of operation 2000 examines the neighboring samples of y_n (K_1 ~~postcursors~~<u>precursors</u> and K_2 ~~precursors~~<u>postcursors</u>) to see if y_n meets the criterion for being a reliable symbol.

On page 17, paragraph 72, lines 11-12, the black space between lines has been removed.

[72] Returning to the regular case, an improved estimate, $\hat{P}_2^q$, can be obtained from:

$$\hat{P}_2^q = \hat{P}_1^q + (2|q| - 1) \cdot \hat{e}_1 \ : q \in [\frac{-\sqrt{M}}{2}, \frac{\sqrt{M}}{2}] \tag{18}$$

where,

$$\hat{e}_1 = \frac{1}{s} \sum_q \frac{1}{2|q| - 1} \cdot \sum_{n \in s_q} \left(\hat{P}_1^q - y_n^q \right) \tag{19}$$

and where s is the number of detected reliable symbols, s_q is a set of reliable symbols that are associated with the constellation point q as defined by Equation 18 and $\{ y_n^q \}$ are the set of sample values which are reliable symbols and are associated with the q^{th} estimated constellation point. Equation 18 defines a set of constellation point estimates for use in channel gain estimation. The channel gain a_0 may be estimated as a ratio of the first constellation point estimate $\hat{P}_2^1$ to the magnitude of a smallest transmitted constellation point, e.g. +1. The estimation method described above can be generalized to the situation in which the constellation may be non symmetrical and the separation between points may be non-uniform.